# PRELIMINARY MANAGEMENT PLAN for the

# NEAL RANCH as an addition to the Sun River Wildlife Management Area

#### INTRODUCTION

Montana Fish, Wildlife and Parks (MFWP) proposes to acquire and then incorporate approximately 3,278 acres in fee title of important wildlife habitat into the Sun River Wildlife Management Area (SRWMA). The property would be purchased with MFWP Habitat Montana Program Funds. The Neal Ranch is a working cattle ranch and neighbors the SRWMA on its east boundary

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Because of the 1987 Wildlife Habitat Acquisition Act (House Bill 526) the Montana Fish, Wildlife & Parks Commission adopted rules that specify a Preliminary Management Plan be written before any final action shall be taken on newly acquired lands. This Preliminary Management Plan is intended to give an immediate general analysis and to provide the basis for public comment. It is proposed that MFWP purchase in fee title the property and incorporate as part of the adjacent SRWMA, thereby incorporating all current rules and management practices into the addition.

The Preliminary Management Plan identifies MFWP's management goals for the property. More specific work activities will be formulated for the final Management Plan after proper inventories have been made, compliance requirements met, and after public comments have been reviewed. Once a final Management Plan is in place, it will be reviewed periodically and necessary adjustments incorporated.

The SRWMA was initially purchased in 1948 to secure important winter range habitat for the Sun River elk herd. Even today, this remains the primary purpose of the Wildlife Management Area (WMA). The SRWMA is managed primarily as winter range habitat for the Sun River elk herd but also contributes significant and high quality habitat for other game and non-game species. Recreational uses of the area include hunting, fishing, hiking, wildlife viewing, and camping. Acquisition of the Neal Property will dovetail well with existing management activities and the overall purpose of the SRWMA.

#### AREA DESCRIPTION

# **Location and Physiographic Characteristics:**

Located approximately 9 miles west of Augusta and 52 miles west of Great Falls in Lewis and Clark County, the Neal Ranch property falls within MFWP administrative Region 4 (See Appendix 1). The property consists of 3,278 deeded contiguous acres to include 1½ miles of common boundary with the SRWMA (See Appendix 2). The proposed acquisition is bordered on the north and east by an additional 1,800 acres of contiguous State School Trust and BLM lands (Appendix 2). Combined with the existing SRWMA (21,023 acres), the total acreage will equal 24,301.

The SRWMA is situated along the foothills of the Rocky Mountain Front. The eastern portion of the WMA consists primarily of grassland rolling hills, benches and coulees. The western portion is comprised of a mixture of limber pine, Douglas fir and aspen stands with smaller mixed grass, forb and shrub meadows. The extreme western portion of the WMA is delineated by Sawtooth Ridge, a tall, rocky mountain face with sheer cliffs and talus slopes. There are three primary creeks that drain the WMA: Rose Creek to the south, Barr Creek to the southeast and Buttolph Creek to the north. The Neal Ranch property will be added to the eastern perimeter of the existing SRWMA and is best described as a mix of intermountain and plains grassland habitat with riparian habitat located along irrigation canal/creek bottoms and lake/pond edges.

Elevations of the Neal property range from 4,215 to 4,608 feet. Soils are generally moderately shallow to moderately deep with abundant carbonate rock fragments with drainage areas having more gravelly soils with a sandy matrix. Annual precipitation averages about 15 inches a year. The mean temperature in January is 23 degrees Fahrenheit and 65 degrees in July. This area also receives significant wind because of weather patterns that form near and around the Rocky Mountain Front. During winter, both the strength and warmth of "Chinook" winds contribute to quick removal of snow from the open grasslands exposing forage for wildlife.

Legal description of the proposed project property:

**Lewis & Clark County** 

Township, Range	Section	Legal Description
T21N, R7W	17	S1/2, S1/2 of NE1/4, SW1/4 of NW1/4
T21N, R7W	18	S1/2
T21N, R7W	19	Entire section
T21N, R7W	20	W1/2, W1/2 of NE1/4, W1/2 of SE1/4, SE1/4 of
		SE1/4
T21N, R7W	29	W1/2, W1/2 of SE1/4, NE1/4
T21N, R7W	30	NE1/4, NE1/4 of NW1/4, E1/2 of SE1/4, NW1/4 of
		SE1/4
T21N, R7W	32	N1/2 (Neal ranch retains access to irrigation ditch),
		SE1/4, E1/2 of SW1/4, portion of W1/2 of SW1/2

Total Deeded = 3,278 acres

Accompanying maps (Appendices 1 & 2) display the lands affected by the proposal. The project's exterior boundary shares 1½ miles of common boundary with the existing SRWMA and would provide nearly 1 mile of additional public access via the Sun Canyon county road on the property's NE boundary. Four different private landowners control property bordering the WMA around the Neal Ranch addition. There are no state or federal lands encumbered or leased in conjunction with this property, however, there are state and federal lands located immediately adjacent to the property. The Neal Ranch will also retain an access easement to an irrigation ditch located on the southeastern portion of the property (Appendix 2).

# Vegetation

#### **Present**

The SRWMA is described as mountain foothill habitat, consisting of three major vegetative types. The Limber Pine / Douglas fir-juniper type occurs on the more western moist aspects of ridges and coulees. A grassland type occupies the drier benches and coulees and is dominated by rough fescue, bluebunch wheatgrass, Idaho fescue and needlegrass. Most of the riparian zones consist of small aspen / willow stands with understory vegetation comprised of western snowberry, Wood's rose, chokecherry, and serviceberry.

The Neal Ranch property is primarily intermountain and prairie grassland habitat, consisting of two major vegetative types. A shrub-grassland type comprises the majority of property, although some riparian communities are found adjacent to irrigation canal/creek bottoms and lake/pond edges. The shrub-grassland component is best described as low/moderate grassland type with some horizontal juniper and shrubby cinquefoil intermixed.

These vegetative types and their associated topographic features make the combined properties year-round habitat for elk, antelope, sharp-tail grouse, Hungarian partridge, and mule and white-tailed deer. Elk attempt to make use of the grassy upland benches and coulees during winter periods on the existing Neal Ranch property, although competition with cattle grazing and active human deterrence makes this difficult. Other notable species observed on the property include bald eagles, trumpeter swans and grizzly and black bears. All of the vegetative types are utilized by a diverse group of small mammals and resident and migratory birds.

The Neal Ranch is currently managed as a working cattle ranch with some hay production. Current stocking rates are low, but have varied depending on the year in years past. The ranch has been managed in a standard grazing rotational pattern. The ranch typically tries to leave at least one pasture ungrazed each year, but this is contingent upon cattle numbers and range conditions. Detailed range trend and condition investigations have not been accomplished.

# **Future**

Due to the importance of this property as additional winter wildlife (elk) habitat, livestock grazing practices will likely be limited and if utilized, will be as part of an established rest rotation pasture system. It is the intent of MFWP that by incorporating the Neal Ranch and any associated grazing systems into existing WMA plans, goals and objectives, better vegetation management and production will result. Maintenance, to include noxious weed management, fence repair/replacement, minimal road and parking area development, etc. will be the responsibility of MFWP.

# **Travel Plan**

#### Present

Public motor vehicle access on the existing SRWMA is by means of one graveled county road that gives way to two entrances on the southern border. From here, MFWP maintained roads continue to the northern and western side of the WMA. There are currently approximately 20 miles of maintained roads within the boundaries of the SRWMA. Older vehicular trails exist on the WMA, but are now used strictly for administrative purposes or have been permanently closed.

#### Future

Any public motorized vehicle activity within the new property will be minimal. An additional parking area/access route may be developed on the northeastern boundary (via the Sun Canyon county road), but further developed motorized road access into the area will be minimized. Currently, unmaintained two-track roads exist on the property. They will be used for maintenance and other administrative purposes only. Motorized vehicles will not be allowed off of designated roads except for administrative use. As an expanded portion of the SRWMA, the December 1 – May 15 seasonal closure to public use will be adopted.

Camping is allowed on the SRWMA in any designated parking/camping area. Camping rules comply with MFWP Administrative Rule 12-8-205, which limits camping in designated camping areas to 14 days and prohibits camps from being left unattended for more than 48 hours. Primitive overnight camping is allowed outside of designated parking/camping areas. Primitive camps are allowed for a duration of 1 night and must be packed in by foot, horseback or other nonmotorized means. All of the latter rules will also apply to the Neal Ranch addition.

# **Physical Developments**

#### Present

Existing physical developments on the SRWMA include external boundary fences (fair to good condition), internal pasture fences (good condition), 1 small older barn (fair condition), 1 garage (good condition), 1 small shed (good condition), a set of corrals (good condition), 1 developed spring (good condition), 1 cabin (good condition), 1 well associated with the cabin, and several vegetation exclosures used for vegetation condition monitoring (all in good condition). There is an additional power line that feeds electricity to the barn/garage/shed complex. An irrigation canal (Willow Creek feeder canal) maintained and controlled by the Greenfields Irrigation District (GID) runs through the northeastern portion of the WMA

There are no known significant physical developments located on the Neal property. Unmaintained two-track roads as well as an irrigation ditch in the southeastern corner of the Property will be retained. The Neal Ranch, by purchase agreement, will retain access rights to the irrigation ditch

located on the southeastern portion of the property.

All water rights connected with the Property will be conveyed upon purchase.

#### Future

The only foreseeable physical developments planned on the property will be related to the removal or maintenance of internal pasture fences and construction of new border fences. Development of an additional parking/access area adjacent to the Sun Canyon county road on the property border is also likely. The Willow creek irrigation canal controlled by GID that runs through the northern and northeastern portion of the existing WMA continues through the northern portion of the Neal Ranch. Greenfields Irrigation District will continue to have access to this canal for maintenance, weed control and other activities associated with maintaining this canal. No other physical developments are planned.

# **Wildlife**

# Present

Current wildlife use of the SRWMA includes the following animals (and/or groups of animals) and their present levels of use:

Primary big game species are antelope, elk, mule and white-tailed deer. Antelope occupy the majority of the grassland coulees and benches yearlong. Antelope numbers vary, but average 30-50 animals. Similar to antelope, elk occupy the majority of the grassland coulees and benches, but also utilize the hills and trees on the western portion of the WMA for thermal cover and as wind breaks. In recent years during winter periods, elk numbers on and around the existing SRWMA have reached 2,500 elk. Mule and white-tailed deer numbers on the property fluctuate within and between years. Highest numbers are found during the fall to spring seasons. Actual numbers are unknown, but based on hunter harvest likely number around 100-150 animals during the fall season for each species. Both deer species typically occupy lower elevation broken timbered and riparian zones, especially in the WMA's northwest corner. Wolf and bear (grizzly and black) routinely utilize multiple habitats on the area. Mountain lions make frequent use of the area while coyote, fox, badger and skunk are more commonly observed.

Addition of the Neal Ranch Property will continue the involvement of sharp-tailed grouse in future management plans. They are primarily found on grassland benches and coulees of the property. Hungarian partridge are present as well, but to a lesser extent. A variety of songbirds, raptors, migratory birds and small mammals use the area in undetermined numbers on a seasonal or yearlong basis.

#### **Future**

Upon acquisition of the Property, habitat management strategies will be directed towards improving the vegetative condition and hence, carrying capacity for elk and to a lesser degree antelope, mule and white-tailed deer, sharp-tailed grouse, and other ground nesting species. Other wildlife species adapted to native grassland habitats will also likely benefit. Predator species associated with prey that prefer such habitats could increase in number.

# **AREA MANAGEMENT**

# **Management Goals**

The primary goal for management of the SRWMA, including addition of the Neal Ranch acres, will be to improve the condition of all vegetative plant communities for the benefit of wildlife. Implicit in this goal is a focus to maximize the productivity of the land base while minimizing maintenance and management requirements/involvement. Increased carrying capacities for elk (among other wildlife) are expected as grazing utilization patterns become more dispersed and less concentrated, thus improving forage conditions, especially during key seasonal periods (e.g., winter and spring). This should reduce elk use of adjacent landowner's crops and pasture lands. The improvement of the habitat for elk and other big game species will also benefit other game and nongame wildlife species. Addition of the Neal Ranch acres will eliminate any future need for elk herding/deterrence on the part of MFWP personnel on this property.

A second and equally important goal will be to provide public access to the property for sport hunting and other recreational pursuits.

# **Management Actions**

The most essential and important components of a wildlife management area are soil and vegetation. Every management action on the Area will be aimed at maintaining or improving the condition of vegetation and soils. Vegetative manipulations to improve habitat for wildlife may include a rest rotation pasture system for livestock grazing, complete rest from livestock grazing, chemical and mechanical treatment of weeds, prescribed burning, and/or other common land management practices.

A change from present grazing practices to either no livestock grazing or implementation of a rest rotation pasture system can be expected. Initial efforts will focus on quantifying the condition and trend of existing vegetation and establishing long-term monitoring efforts, similar to other efforts that already exist on the SRWMA.

Biological, chemical, and mechanical treatments may be employed to reduce the occurrence of noxious weeds, to establish stands of woody vegetation, and/or to stimulate rangeland vegetation. All MFWP actions to control noxious weeds will be in accordance with the Department's weed

management policy.

The use of fire may be prescribed to manipulate plant communities. An example would be to modify plant successional stages to increase the occurrence of desired shrub or grass species. Any such effort would be made in coordination with adjacent landowners and state and county officials.

Public use and access to the property will be managed consistent with MFWP's state and regional management objectives for WMA's. Recreation on the SRWMA and hunter harvest of game species will be maintained or improved. Public use of the area will be consistent with resource protection goals (i.e., vegetation and soil stability). A winter use closure to all unauthorized activities will be maintained to address wildlife energetic needs (i.e., minimize the energy loss for elk during demanding/critical periods). This winter closure concept is in effect on all wildlife management areas within MFWP's Region 4 that emphasize protection of big game winter range. Other regulations as they specifically relate to this and other WMA's will also apply. These include permit and license-only fur trapping and hunting activities and a closure to mountain lion hunting after November 30.

Fish, Wildlife and Parks will coordinate with adjacent landowners in maintaining or developing certain land management plans/practices. These may include, but are not limited to: cooperative grazing systems (if necessary), developing land trades, conservation easements, herding agreements, and/or additional land acquisition. All practices will be considered first to conform to the intent of the SRWMA. Fish, Wildlife & Parks will promote its block management and hunting access programs with adjacent landowners affected by the acquisition of the SRWMA and subsequently, the Neal Ranch property. Public entities such as the Bureau of Land Management, Farm Services Agency, Natural Resources Conservation Service, Montana Department of Natural Resources and Conservation, Lewis and Clark County Conservation District, Lewis and Clark County Extension Service, and the Lewis and Clark County Commissioners will be consulted and advised as requested and needed.

An annual "in lieu of taxes" payment will be made by MFWP to Lewis and Clark County in a sum equal to the amount of taxes which would be payable on county assessment of the property were it taxable to a private citizen (MCA 87-1-603).

#### **Management Objectives**

Manipulating vegetative plant communities on the SRWMA is expected to increase yearlong usage by antelope, mule and white-tailed deer, sharp-tailed grouse, and Hungarian partridge as well as seasonal use by elk. The elk population objective is to have no more than 2,000 elk wintering (November-May) on the entire SRWMA at any given time. Mule and white-tailed deer population objectives are to have not more than 150 deer of each species on the WMA during fall periods. The population objective for antelope is to have not more than 100 resident and/or seasonally migrating antelope on the WMA. The population objective for sharp-tailed grouse is to increase total numbers by 2X.

Fish, Wildlife and Parks will continue its aggressive approach to weed management on the SRWMA. Noxious weeds will be identified, mapped, and controlled in a manner consistent with MFWP's Region 4 Weed Management Plan. There are two objectives for weed management on the SRWMA: (1) stop the spread of noxious weeds, and (2) reduce the occurrence of noxious weeds on the SRWMA. Fish, Wildlife & Parks will use its own personnel and/or private contractors, and coordinate with adjacent landowners and county weed boards for weed control. Greenfields Irrigation District will continue to be responsible for weed management on the Willow Creek feeder canal.

# **Impacts**

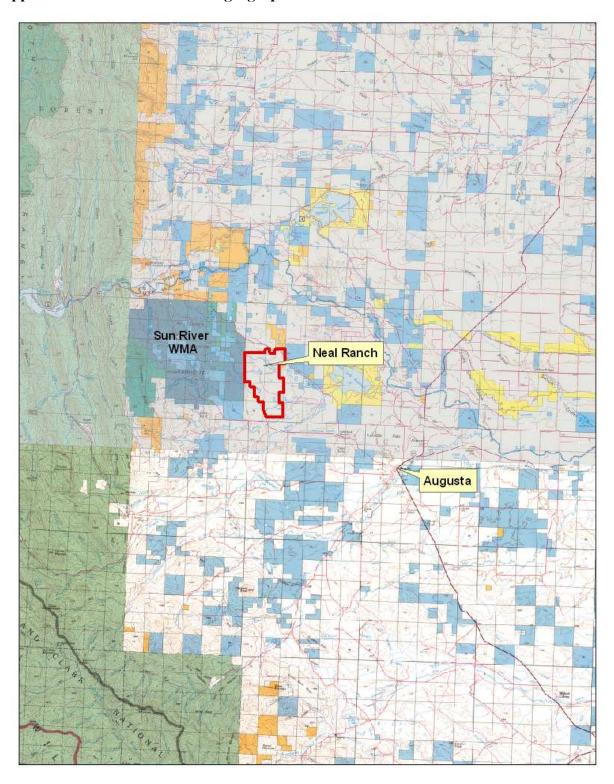
Proposed changes in management direction for the SRWMA -- adjustments to some land use practices (e.g., no cattle grazing or a rest rotation pasture grazing system) -- will benefit wildlife currently using the area. Improving habitat quality and quantity will assist in alleviating potential elk problems on adjacent private lands. Should game depredation occur, one or more of the following methods will be implemented: scare guns; elk herding tactics; temporary panels for haystacks; materials for permanent haystack yards; kill permits; and special hunting seasons. A combination of the above methods would be used as necessary to resolve problems that might occur.

Public use of the property will be guaranteed from May15 through November 30. Use during this period will be consistent with the established management/travel plan.

# **Management Activities**

Aerial and ground surveys and inventories of wildlife use of the area will be conducted. The area will be used on occasion for capturing and individually marking wildlife as research needs arise. Changes in numbers and patterns of use by elk and other big game and wildlife species will be documented. Vegetation sampling and evaluation will be conducted on a regular basis in conjunction with existing SRWMA vegetation monitoring guidelines. Other land management specialists and agencies will be contacted as needed for technical assistance in order to implement specified management actions. Physical developments will be evaluated relative to management goals and objectives. Historic and cultural values and a final management plan will dictate the extent of physical development and activity that's needed. Entrance and boundary signs will be erected to facilitate public use and to inform the public of the benefits and opportunities in the area.

Appendix 1. Neal Ranch and its geographic relation to the Sun River WMA.



Appendix 2. Neal Ranch proposed acquisition of 3,278 acres.

